

In the Claims:

Claims 1, 4, 6 and 8-18 are pending as follows:

1. (Previously presented) A storage area network (SAN) management and configuration method via enabling in-band communications comprising the steps of:
utilizing a SAN management application for managing and configuring the storage area network; said SAN management application communicates with at least one SAN-connected host system and communicates with a host bus adapter (HBA) device driver, and

providing a pass through in said HBA device driver for passing communications to a designated device in the storage area network from said SAN management application including at least one topology analysis command; said at least one topology analysis command including a command to get interconnect information and a command to get topology information; and providing said pass through includes providing at least a transport pass through and an extended link service (ELS) pass through; each of said transport pass through and said extended link service (ELS) pass through being a binary pass through, each taking applied commands and passing said commands to said designated device in the storage area network.

2. (previously presented) A storage area network (SAN) management and configuration method as recited in claim 1 wherein the step of utilizing said SAN management application for communicating with a HBA device driver includes the step of providing a management application agent coupled between said SAN management application and said HBA device driver.

3. (previously presented) A storage area network (SAN) management and configuration method as recited in claim 2 includes the step of utilizing said management application agent for providing predefined, fibre channel protocol functions for communicating with said device in the storage area network.

4. (previously presented) A storage area network (SAN) management and configuration method as recited in claim 3 wherein the step of providing predefined protocol functions for communicating with said device in the storage area network include the step of providing a transport protocol function and an extended link service (ELS) protocol function.

5. (canceled)

6. (previously presented) A storage area network (SAN) management and configuration method as recited in claim 1 wherein the step of providing said pass through in said host bus adapter (HBA) device driver for passing communications to a device in the storage area network from said SAN management application includes the step of providing said pass through for passing a plurality of commands.

7. (canceled)

8. (original) A storage area network (SAN) management and configuration method as recited in claim 6 includes the step of providing said pass through for passing at least one performance analysis command.

9. (original) A storage area network (SAN) management and configuration method as recited in claim 6 includes the step of providing said pass through for passing at least one attribute analysis command.

10. (original) A storage area network (SAN) management and configuration method as recited in claim 6 includes the step of providing said pass through for passing at least one configuration command.

11. (Previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications comprising:

a storage area network (SAN) management application for managing and configuring the storage area network; said SAN management application communicates with at least one SAN-connected host system;

said SAN-connected host system including a management application agent for communicating with a host bus adapter (HBA) device driver;

said HBA device driver for communicating with a designated device in the storage area network; said HBA device driver including at least one pass through service for passing a plurality of commands to said designated device in the storage area network; said commands including at least one topology analysis command; said at least one topology analysis command including a command to get interconnect information and a command to get topology information;

said at least one pass through including a transport pass through and an extended link service (ELS) pass through; each of said transport pass through and said extended link service (ELS) pass through being a binary pass through, each taking applied commands and passing said commands to the designated device in the storage area network.

12. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 11 wherein SAN-connected host system includes a fibre channel hierarchy and a HBA device driver interface.

13. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 12 wherein said at least one pass through service bypasses said HBA device driver interface and a plurality of layers of said fibre channel hierarchy.

14. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 13 wherein said plurality of layers of said fibre channel hierarchy includes a small computer system interface (SCSI) protocol driver, an upper level protocol (UPL) mapping, and a common services layer.

15. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 11 wherein said at least one pass through service for passing said plurality of commands to said designated device in the storage area network include at least one attribute analysis command.

16. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 11 further includes at least one performance analysis command and at least one configuration command.

17. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 11 wherein said management application agent provides predefined protocol functions for communicating with said designated device in the storage area network; said predefined protocol functions including a transport protocol function passed to said designated device by said transport pass through.

18. (previously presented) A storage area network (SAN) management and configuration apparatus via enabling in-band communications as recited in claim 11 wherein said management application agent provides predefined protocol functions for communicating with said designated device in the storage area network; said predefined protocol functions including an extended link service (ELS) protocol function passed to said designated device by said extended link service (ELS) pass through.